

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Atty Dkt. 723-960

C# M#

DEMERS et al.

Group Art Unit: 3713

Serial No. 09/726,218

Examiner: Unassigned

Filed: November 28, 2000

Date: August 22, 2001

Title: METHOD AND APPARATUS FOR EFFICIENT GENERATION OF TEXTURE  
COORDINATE DISPLACEMENTS FOR IMPLEMENTING EMBOSS-STYLE BUMP  
MAPPING IN A GRAPHICS RENDERING SYSTEM

Assistant Commissioner for Patents  
Washington, DC 20231



TC 3700 MAIL ROOM

AUG 24 2001

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Sir:

**INFORMATION DISCLOSURE STATEMENT**

This is a response/amendment/letter in the above-identified application and includes an attachment which is hereby incorporated by reference and the signature below serves as the signature to the attachment in the absence of any other signature thereon.

**Fees are attached as calculated below:**

Total effective claims after amendment 0 minus highest number  
previously paid for 20 (at least 20) = 0 x \$ 18.00 \$ 0.00

Independent claims after amendment 0 minus highest number  
previously paid for 3 (at least 3) = 0 x \$ 80.00 \$ 0.00

If proper multiple dependent claims now added for first time, add \$270.00 (ignore improper) \$ 0.00

Petition is hereby made to extend the current due date so as to cover the filing date of this  
paper and attachment(s) (\$110.00/1 month; \$390.00/2 months; \$890.00/3 months) \$ 0.00

Terminal disclaimer enclosed, add \$ 110.00 \$ 0.00

☐ First/second submission after Final Rejection pursuant to 37 CFR 1.129(a) (\$710.00) \$ 0.00

☐ Please enter the previously unentered, filed

☐ Submission attached

**Subtotal \$ 0.00**

If "small entity," then enter half (1/2) of subtotal and subtract -\$ 0.00

☐ Applicant claims "small entity" status. ☐ Statement filed herewith

Rule 56 Information Disclosure Statement Filing Fee (\$180.00) \$ 0.00

Assignment Recording Fee (\$40.00) \$ 0.00

Other: 0.00

Technology Center 2600

**TOTAL FEE ENCLOSED \$ 0.00**

The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140. A duplicate copy of this sheet is attached.

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NIXON & VANDERHYE P.C.  
By Atty: William G. Niessen, Reg. No. 29,683

Signature: 

Corporation (URL: [www.nvidia.com](http://www.nvidia.com)).<sup>1</sup> The remaining documents listed were obtained from the indicated publication source shown on the PTO-1449 form or downloaded from Internet websites of companies and /or publishers that commonly post information related to video game systems, 3D graphic processing products or reviews of such. Copies of the full text references listed were obtained from local computer book stores.

The Examiner's attention is also directed to the following co-pending U.S. Patent Applications which are directed toward technical subject matter related to the subject application: (It is presumed that the Examiner has access to co-pending applications. However, applicant is willing to provide a copy of any related co-pending application to the Examiner upon request on a separate CD ROM).

- Application No. 09/465,754, filed December 17, 1999, (atty. dkt. no. 723-799), entitled "Vertex Cache For 3D Computer Graphics",
- Application No. 09/726,223, filed November 28, 2000 (atty. dkt. no. 723-751), entitled "Z Value Clamping In Near-Z Range To Maximize Precision Of Visually Important Z Components And To Avoid Near-Z Clipping In A Graphics Rendering System",
- Application No. 09/726,215, filed November 28, 2000 (atty. dkt. no. 723-959), entitled "Method and Apparatus for Buffering Graphics Data in a Graphics System ",
- Application No. 09/722,419, filed November 28, 2000 (atty. dkt. no. 723-958), entitled "Graphics Pipeline Token Synchronization",
- Application No. 09/722,382, filed November 28, 2000 (atty. dkt. no. 723-961), entitled "Method And Apparatus For Direct and Indirect Texture Processing In A Graphics System",
- Application No. 09/722,367, filed November 28, 2000 (atty. dkt. no. 723-968), entitled "Recirculating Shade Tree Blender For A Graphics System",
- Application No. 09/722,381, filed November 28, 2000 (atty. dkt. no. 723-962), entitled "Method And Apparatus For Environment-Mapped Bump-Mapping In A Graphics System",

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<sup>1</sup> Applicants have listed publication dates on the attached PTO-1449 based on information presently available. However, the listed publication dates should not be construed as an admission that the information was actually

- Application No. 09/726,216, filed November 28, 2000 (atty. dkt. no. 723-967), entitled "Achromatic Lighting in a Graphics System and Method",
- Application No. 09/726,226, filed November 28, 2000 (atty. dkt. no. 723-964), entitled "Méthod And Apparatus For Anti-Aliasing In A Graphics System",
- Application No. 09/722,380, filed November 28, 2000 (atty. dkt. no. 723-957), entitled "Graphics System With Embedded Frame Buffer Having Reconfigurable Pixel Formats",
- Application No. 09/585,329, filed June 2, 2000, entitled "Variable Bit Field Color Encoding" (atty. dkt. no. 723-749),
- Application No. 09/726,212, filed November 28, 2000 (atty. dkt. no. 723-956), entitled "Method And Apparatus For Dynamically Reconfiguring The Order Of Hidden Surface Processing Based On Rendering Mode",
- Application No. 09/726,212, filed November 28, 2000 (atty. dkt. no. 723-973), entitled "Method And Apparatus For Providing Non-Photorealistic Cartoon Outlining Within A Graphics System",
- Application No. 09/726,225, filed November 28, 2000, (atty. dkt. no. 723-954), entitled "Method And Apparatus For Providing Improved Fog Effects In A Graphics System",
- Application No. 09/722,664, filed November 28, 2000, (atty. dkt. no. 723-969), entitled "Controller Interface For A Graphics System",
- Application No. 09/726,221 filed November 28, 2000 (atty. dkt. no. 723-955), entitled "Method And Apparatus For Texture Tiling In A Graphics System",
- Application No. 09/722,667, filed November 28, 2000 (atty. dkt. no. 723-971), entitled "Method And Apparatus For Pre-Caching Data In Audio Memory",
- Application No. 09/722,378, filed November 28, 2000 (atty. dkt. no. 723-965), entitled "Z-Texturing",
- Application No. 09/723,336, filed November 28, 2000 entitled "Application Program Interface for a Graphics System" (atty. dkt. no. 723-976),

- Application No. 09/722,663 , filed November 28, 2000 (atty. dkt. no. 723-963), entitled "Graphics System With Copy Out Conversions Between Embedded Frame Buffer And Main Memory",
- Application No. 09/722,665, filed November 28, 2000 (atty. dkt. no. 723-970), entitled "Method and Apparatus for Accessing Shared Resources",
- Application No. 09/723,335, filed November 28, 2000 (atty. dkt. no. 723-972), entitled "External Interfaces For A 3D Graphics and Audio Coprocessor",
- Application No. 09/726,220, filed November 28, 2000 (atty. dkt. no. 723-974), entitled "Graphics Processing System With Enhanced Memory Controller",
- Application No. 09/722,390, filed November 28, 2000 (atty. dkt. no. 723-966), entitled "Low Cost Graphics System With Stitching Hardware Support For Skeletal Animation", and
- Application No. 09/722,421, filed November 28, 2000 (atty. dkt. no. 723-953), entitled "Shadow Mapping In A Low Cost Graphics System".

The identification of the above listed co-pending U.S. Patent Applications is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent.

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No statement under 37 C.F.R. § 1.97(e) or fee is required. In the event, a first Office Action has been mailed prior to filing of the present Information Disclosure Statement, the Office is requested to treat the present paper as a submission under 37 C.F.R. § 1.97(c) and charge the undersigned's Deposit Account No. 14-1140 for the fee required by 37 C.F.R. § 1.17(p).

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 14-1140 referencing docket number: 723-670.

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In re Patent Application of

DEMERS et al.

Serial No. 09/726,218

Filed: November 28, 2000

For: METHOD AND APPARATUS FOR EFFICIENT  
GENERATION OF TEXTURE COORDINATE  
DISPLACEMENTS FOR IMPLEMENTING EMBOSS-  
STYLE BUMP MAPPING IN A GRAPHICS RENDERING  
SYSTEM



Atty. Ref.: 723-960

Group: 3713

Examiner: Unassigned

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AUG 24 2001  
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RECEIVED August 22, 2001

Assistant Commissioner for Patents  
Washington, DC 20231

MAR 29 2002

Technology Center 2600

Sir:

**INFORMATION DISCLOSURE STATEMENT**

Attached is a listing on accompanying Forms PTO-1449 of U.S. and foreign Patent documents and other publications. The cited prior art documents have not been analyzed in detail by the undersigned but are believed to relate either directly or indirectly to 3D graphics processors or related subject matter. A copy of each listed document is provided on the accompanying CD ROM (except for the listed textbook references). Hard (paper) copies of all documents including the listed textbook references are being filed in co-pending application Ser. No. 09/722,382 (Leather et al.), filed November 28, 2000 (atty. dkt. no. 723-961). The Examiner is requested to initial and date the attached form PTO-1449 and to return a copy of the initialed document to the undersigned as an indication that the attached references have been considered and made of record in this case.

The U.S. and foreign patent documents listed on accompanying Form PTO-1449 were downloaded from the USPTO and other patent databases accessible via the Internet. The Whitepapers, Technical Briefs and Technical Presentations listed under OTHER DOCUMENTS were obtained via the Internet from a website maintained by Nvidia

DEMERS et al.  
Serial No. 09/726,218

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:



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